

Basics on Linear and Quadratic Equations

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Algebra 1 is a prerequisite for Geometry. Please review the Algebra of linear and quadratic equations as they are essential concepts to solve coordinate Geometry problems. The following links take you to some of the many websites you can visit to get information about linear and quadratic equations. These topics can be found in any Algebra book.

- [Finding the Midpoint of a Line Segment](#)
- [Finding Parallel and Perpendicular Lines](#)
- [Finding the Equation of a Line from 2 Points](#)
- [Gradient \(Slope\) of a Straight Line](#)
- [Y Intercept of a Straight Line](#)
- [Distance Between 2 Points](#)
- [Quadratic Equations](#)
- <https://www.mathsisfun.com/algebra/linear-equations.html>
- <https://www.mathsisfun.com/algebra/quadratic-equation.html>

Video Resources:

[Videos of linear equation basics](#)

<https://www.bing.com/videos/search?q=linear+equation+basics&qpv=linear+equation+basics&view=detail&mid=D345C09C12239A60E2B3D345C09C12239A60E2B3&FORM=VRDGAR>

<https://www.bing.com/videos/search?q=two+equations+and+two+unknowns&view=detail&mid=82664395B8D8C34A0C4582664395B8D8C34A0C45&FORM=VRDGAR>

<https://www.bing.com/videos/search?q=How+to+Solve+Equation+with+Two+Different+Variables&view=detail&mid=5811644B20E2FD6D90305811644B20E2FD6D9030&FORM=VRDGAR>

Solving Quadratic Equations

$$ax^2 + bx + c = 0$$

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

Standard Form A, B, and C are Integers $Ax + By = C$	Slope-Intercept slope m y-intercept b $y = mx + b$
Linear Equations	
Point-Slope Form slope m point (x_1, y_1) $y - y_1 = m(x - x_1)$	

